

AMENDMENTS TO THE CLAIMS

1. (currently amended) An optical disk recording method comprising:

deriving a recording condition of old user data recorded on a rewritable optical disk by reproducing the old user data or from a reproduced waveform;

deciding an overwriting recording condition to overwrite new data on the old user data recorded under the recording condition of the old user data; and

overwriting the new data on the old user data according to the decided overwriting recording condition.

2. (currently amended) The optical disk recording method according to claim 1, wherein the recording condition of the old user data is derived upon an instruction to overwrite the new data on old user data recorded on the rewritable optical disk.

3. (currently amended) An optical disk recording method comprising:

detecting a crosstalk amount from a reproduced signal of old user data recorded on a rewritable optical disk;

setting a recording condition based on the detected crosstalk amount; and

overwriting new data according to the recording condition.

4. (currently amended) The optical disk recording method according to claim 3, wherein the crosstalk amount is detected upon an instruction to overwrite the new data on old user data recorded on the rewritable optical disk.

5. (original) The optical disk recording method according to claim 3, wherein the recording condition is set in response to a difference between the detected crosstalk amount and a reference crosstalk amount.

6. (original) The optical disk recording method according to claim 5, wherein an optimum recording power is decided by applying a trial writing onto a trial writing area of the rewritable optical disk, and the reference crosstalk amount is detected based on a reproduced signal of data that are recorded at the optimum recording power.

7. (currently amended) An optical disk recording method comprising:

acquiring a peak-to-peak value of a reproduced signal of old user data recorded on a rewritable optical disk;

setting a recording condition based on the peak-to-peak value; and

overwriting new data according to the recording condition.

8. (currently amended) The optical disk recording method according to claim 7, wherein the peak-to-peak value is acquired upon an instruction to overwrite the new data on old user data recorded on the rewritable optical disk.

9. (currently amended) The optical disk recording method according to claim 7, wherein an optimum recording power is decided by applying a trial writing onto a trial writing area of the rewritable optical disk, and the recording condition is set in response to a difference between the peak-to-peak value of the reproduced signal of data recorded at the optimum recording power and the peak-to-peak value of the reproduced signal of the old user data.

10. (currently amended) An optical disk recording method comprising:

applying a trial writing while changing a laser power irradiated onto a trial writing area of a rewritable optical disk by a predetermined amount;

deciding an optimum recording power based on a reproduced signal of trial-written data;

acquiring a first peak-to-peak value based on a peak value and a bottom value of a reproduced signal of data recorded at the optimum recording power;

acquiring a second peak-to-peak value based on a peak value and a bottom value of a reproduced signal of old user data recorded on the rewritable optical disk; and

correcting an erasing power of a laser beam irradiated onto the rewritable optical disk in response to a difference between the first and second peak-to-peak values, and overwriting the new data by applying a corrected erasing power.

11. (currently amended) The optical disk recording method according to claim 10, wherein the trial writing is applied upon an instruction to overwrite the new data on old user data recorded on the rewritable optical disk.

12. (currently amended) An optical disk recording system comprising:

a reproducing unit which reproduces data recorded on a rewritable optical disk;

a crosstalk detecting unit which detects a crosstalk amount from a reproduced signal of the reproducing unit;

a recording-condition setting unit which sets a recording condition based on the crosstalk amount detected by the crosstalk detecting unit; and

a recording unit which overwrites new data on old user data according to the recording condition set by the recording- condition setting unit.

13. (currently amended) An optical disk recording system comprising:

a reproducing unit which reproduces data recorded on a rewritable optical disk;

an envelope detecting unit which acquires a peak-to-peak value of a reproduced signal of the reproducing unit;

a recording-condition setting unit which sets a recording condition based on the peak-to-peak value acquired by the envelope detecting unit; and a recording unit which overwrites new data on old user data according to the recording condition set by the recording- condition setting unit.

14. (currently amended) The optical disk recording method of claim 1 wherein said overwriting the new data step is performed using a first apparatus and wherein said old user data is recorded on said optical disk by an apparatus that is different from said first apparatus.

15. (new) An optical disk recording method comprising:

deriving a recording condition of old user data recorded on a rewritable optical disk by reproducing the old user data and detecting a crosstalk amount from the reproduced old user data;

deciding an overwriting recording condition to overwrite new data on the old user data recorded under the recording condition of the old user data based on the detected crosstalk amount; and

overwriting the new data on the old user data according to the decided overwriting recording condition.